



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 10/582,762 | 06/12/2006 | Andrew Augustine Wajs | 2069.046US1 | 1471 |

21186 7590 06/24/2010
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

| |
|----------|
| EXAMINER |
|----------|

CALLAHAN, PAUL E

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2437

| | |
|-------------------|---------------|
| NOTIFICATION DATE | DELIVERY MODE |
|-------------------|---------------|

06/24/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
request@slwip.com

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/582,762 | Applicant(s) WAJS ET AL. | |
| | Examiner PAUL CALLAHAN | Art Unit 2437 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is directed towards the Applicant's response filed 3-24-2010.
2. Claims 1-12 are pending and have been examined.
3. The indicated allowability of claims 1-12 is withdrawn in view of the newly discovered reference to Candelore. Rejections based on the newly cited reference(s) follow.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8 and 12 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 9, 11, and 12 each recite the limitation: "...monitoring the payloads of at least some of the transport stream packets in the sequence..." It is not

clear from the context of the claim how many "some" of the packets refers to and therefore the term renders the claims indefinite.

Claims 2-8 and 10 are dependent on claims 1 and 9 and do not cure their deficiency. Therefore these claims are rejected on the same basis as claims 1 and 9.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 9-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As for claims 9 and 10, the preambles of the claims indicate that they are directed towards a system. However, as per the Applicant's Specification at, for example, paragraphs [0007], [0011], and [0032] it is apparent that the system may be embodied entirely in software. The Applicant has amended the claim to include the limitation of receiving the data at a port. However, it is well known in the art that the term may refer to a software port. Since the claims do not positively recite any limitation that specifies the software as being embodied in a *non-transitory* computer readable medium they set forth only functional descriptive language and are non-statutory since this does not fall into one of the classes of invention eligible for the grant of a US patent. Unless embodied in a non-transitory computer-readable medium the software in and of

Art Unit: 2437

itself cannot be considered as a computer component, and hence cannot effect a change of state of a processor to produce a useful or tangible result.

As for claim 11, the preamble of the claim indicates that it is directed towards a computer-readable storage medium containing a set of instructions. However, the claim does not indicate that the computer-readable medium is a *non-transitory* computer-readable medium and therefore the claim is directed towards non-statutory subject matter for the same reasons given supra for claims 9 and 10.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-4 and 9-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Candelore US 2003/0081776.

Candelore teaches:

As per claim 1, a method of partially scrambling a data stream including transport stream packets [0081]-[0084], each transport stream packet having a header and a payload [0081]-[0084], wherein a sequence of transport stream packets has payloads carrying encoded data elements [0084], arranged in units [0087], including: receiving

Art Unit: 2437

the data stream at a port [0042], selecting transport stream packets forming a sub-sequence of the sequence [0087], and scrambling the payloads of each transport stream packet in the sub-sequence [0088], monitoring the payloads of at least some of the transport stream packets in the sequence for the presence of data indicating a boundary between two subsequent units [0084], and, for selected units, including at least one of the transport stream packets carrying data forming part of the selected unit in the sub-sequence [0089].

As per claim 2, Candelore teaches a method according to claim 1, wherein the data stream is a multiplex of elementary streams [0085], the method including identifying at least one elementary stream including the sequence of transport stream packets and monitoring only payloads of packets in the identified elementary stream(s) [0085].

As per claim 3, a method according to claim 1, wherein the selected units include units containing at least part of an encoded representation of a picture [0084].

As per claim 4, a method according to claim 1, wherein each unit contains an indication of the type of data to follow and a part containing that data [0084], wherein the type of each unit in the monitored payloads is determined from the indication and the unit is included among the selected units if the type corresponds to at least one specific type [0084].

As for claim 9, this claim is directed towards the system for carrying out the method of claim 1. Claim 9 recites substantially the same limitations as claim 1 and is rejected on the same basis as that claim.

As for claim 11, this claim is directed towards a computer-program that causes a computer to carry out the method steps of claim 1. Claim 11 recites substantially the same limitations as claim 1 and is rejected on the same basis as that claim.

As for claim 12, this claim is directed towards a method substantially the same as that of claim 1. Claim 12 recites only one limitation that differs significantly from claim 1, i.e., modulating the data stream at a transmitter. This feature is taught by Candelore at [0089]-[0090]. The remaining limitations of claim 12 are substantially the same as found in claim 1 and are thereby rejected on the same basis as for claim 1.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2437

12. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Candelore and Unger et al., International Application Number PCT/US02/40050, Publication Number WO 03/061289 A1, International Pub. Date: 7-24-03, (Submitted with the Applicant's IDS).

As per claim 5, Candelore teaches a method according to claim 4, but not wherein units of types other than the specific type(s) are randomly included among the selected units. However, Unger et al. does teach this feature (page 25 lines 1-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this feature into the system of Candelore. It would have been obvious to do so since this would make it more difficult for an unauthorized party to decode and utilize the content.

As per claim 6, Candelore teaches a method according to claim 5, wherein the types are defined by the encoding technique with which the encoded data elements have been formed [0084].

13. Claims 7, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Candelore and Burazerovic et al., International Application Number PCT/IB2003/005965, Publication number WO 2004/056112 A1, International Pub. Date: 7-1-04, (Submitted with the Applicant's IDS)

As per claim 7, Candelore teaches a method according to claim 4, but not further wherein the encoded data elements are decodable using a predictive decoding technique and the specific types include a type of data element allowing a prediction to be derived from only the decoded data belonging to the data element. However, Burazerovic does teach this feature (page 3 lines 5-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this feature into the system of Candelore. It would have been obvious to do so since this would allow for the use of common, industry standard predictive coding algorithms in the system of Candelore and increase the utility of that system.

As per claims 8 and 10, Candelore teaches the features of claims 1 and 9, but not further wherein up to a maximum number of transport stream packets following a first transport stream packet carrying data forming part of a selected unit are included in the sub-sequence. However, Burazerovic does teach this feature (col. 2 lines 20-25, page 4 lines 9-16, page 5 lines 25-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this feature into the system of Candelore. It would have been obvious to do so since this would allow for allocation of a preselected amount of transmission bandwidth devoted to the scrambled data and hence minimize the computational load on a receiver.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/PEC/
AU2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437